Title (en)

Device with MOSFET on SOI

Title (de)

SOI-MOSFET Vorrichtung

Title (fr)

Dispositif à MOSFET sur SOI

Publication

EP 1947686 B1 20190619 (FR)

Application

EP 08100640 A 20080118

Priority

FR 0752776 A 20070119

Abstract (en)

[origin: EP1947686A2] The device (1) has an upper region (102) including a MOSFET type semiconductor device i.e. P-channel MOS transistor (106), with a metallic gate (108) and arranged on a semiconductor layer (118). A lower region (104) has a MOSFET type semiconductor device i.e. N-channel MOS transistor (134), arranged on a portion (132b) of another semiconductor layer, where the layers are made of strained silicon. The transistor (134) has a gate (128b) formed by a portion of a metallic layer. The latter semiconductor layer is arranged on an insulating layer (146) stacked on another metallic layer (148). An independent claim is also included for a method of manufacturing a silicon-on-insulator MOSFET device.

IPC 8 full level

H01L 21/336 (2006.01); **H01L 21/8238** (2006.01); **H01L 21/84** (2006.01); **H01L 27/12** (2006.01); **H01L 29/786** (2006.01)

CPC (source: EP US)

H01L 21/84 (2013.01 - EP US); **H01L 27/1203** (2013.01 - EP US); **H01L 27/1207** (2013.01 - EP US); **H01L 29/78648** (2013.01 - EP US); H01L 21/823807 (2013.01 - EP US); H01L 21/823878 (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1947686 A2 20080723; **EP 1947686 A3 20100224**; **EP 1947686 B1 20190619**; FR 2911721 A1 20080725; FR 2911721 B1 20090501; US 2008173944 A1 20080724; US 7804134 B2 20100928

DOCDB simple family (application)

EP 08100640 A 20080118; FR 0752776 A 20070119; US 1676008 A 20080118